Grade 8 Achievement Level Descriptors

Nebraska Math Alternate Assessment

Developing	On Track	College and Career Ready Benchmark
Developing learners do not yet demonstrate	On Track learners demonstrate proficiency in	College and Career Ready Benchmark
proficiency in the knowledge and skills	the knowledge and skills necessary at this	learners demonstrate advanced proficiency in
necessary at this grade level, as specified in	grade level, as specified in the assessed	the knowledge and skills necessary at this
the assessed Nebraska College and Career	Nebraska College and Career Ready	grade level, as specified in the assessed
Ready Standards. These results provide	Standards. These results provide evidence	Nebraska College and Career Ready
evidence that the student may need	that the student will likely be ready for	Standards. These results provide evidence
additional support for academic success at	academic success at the next grade level.	that the student will likely be ready for
the next grade level.		academic success at the next grade level.
Students at this level	Students at this level	Students at this level
 Identify whole numbers, fractions, or decimals. Identify numbers with a base of 2, 3, or 4 and positive exponents of 2 or 3 in expanded form. 	 Distinguish among whole numbers, fractions, and decimals. Represent numbers with a base of 2, 3, 4, or 5 and positive exponents of 2 and 3 in expanded form (e.g., 4^3 = 4 x 4 x 4). 	 Distinguish among and identify whole numbers, fractions, and decimals. Translate between representations of numbers with a base of 2, 3, 4, or 5 and positive exponents of 2 or 3 and their expanded form.
 Compare or order fourths, halves, and whole numbers 1–5 with a number line. 	 Compare and order tenths, fourths, thirds, halves, and whole numbers 1–10 with a number line. 	 Compare and order tenths, fourths, thirds, halves, and whole numbers 1–10 with a number line in a real- world problem.
 Identify the squares of whole numbers up to 3. 	 Identify the squares of whole numbers up to 5. 	 Represent the squares of whole numbers up to 5 both numerically and pictorially.

- Identify absolute value using a model.
- Identify correct estimations of multiplication results to the nearest 10, up to 50.
- Identify an expression with one operation, limited to addition or subtraction, that matches a description.
- Identify the rate of change of a proportional relationship when given a table.
- Recognize a point of intersection (solution) for intersecting lines on a coordinate plane.
- Identify a point on a line going through the origin.
- Identify the solution to a simple equation with up to two steps, using whole numbers.
- Identify the solution to a simple inequality with up to two steps using whole numbers.

- Determine absolute value using a model (e.g., temperature below zero).
- Estimate multiplication results to the nearest 10, up to 100.
- Identify an expression with two different operations that matches a description.
- Describe the rate of change of a proportional relationship when given a table.
- Identify the point of intersection (solution) for intersecting lines on a coordinate plane.
- Given a graph of a line through the origin and a point on the line, determine another point on the line.
- Solve a two-step equation using whole numbers (e.g., 2n – 8 = 0; n = 4).
- Solve a two-step inequality using whole numbers (e.g., 2n – 8 > 0; n > 4).

- Apply absolute value using a model.
- Estimate multiplication results in context to the nearest 10, up to 100.
- Complete an expression with two different operations to match a description.
- Determine the missing value in a table of values when given the rate of change of a proportional relationship.
- Identify two lines on a coordinate plane that intersect at a given point.
- Complete the graph of a line going through the origin when given two other points on the line.
- Solve a two-step equation using whole numbers in a real-world problem.
- Solve a two-step inequality using whole numbers in a real-world problem.

- Identify an equation that represents a simple number pattern limited to counting by 2's, 5's, and 10's.
- Identify an equation that represents a simple real-world problem with fractions, limited to halves and fourths.
- Identify the answer to a simple realworld problem with fractions, limited to halves and fourths.
- Identify the missing angle measure in 45-45-90 triangles or 30-60-90 triangles when given two of the angles and a drawing of the triangle.
- Recognize a shape with its reflection.
- Recognize congruent twodimensional pairs of shapes.
- Recognize similar two-dimensional shapes.
- Recognize the distance between two points on the x- or y-axis in quadrant I.

- Identify an equation that represents a number pattern.
- Identify an equation that represents a real-world problem with fractions.
- Solve a real-world problem with fractions.
- Identify the missing angle measure in 45-45-90 triangles and 30-60-90 triangles when given two of the angles and a drawing of the triangle.
- Identify the orientation of a shape or letter following a reflection.
- Distinguish between pairs of congruent and non-congruent twodimensional shapes.
- Distinguish between pairs of similar and non-similar two-dimensional shapes.
- Find the distance between two points on the x- or y-axis in guadrant I.

- Identify an equation that represents a complex number pattern.
- Complete an equation that represents a real-world problem with fractions.
- Solve a complex real-world problem with fractions.
- Determine the missing angle measure in context in 45-45-90 or 30-60-90 triangles when given two of the angles and a drawing of the triangle.
- Complete a reflection of a shape or letter.
- Represent pairs of two-dimensional shapes that are congruent or noncongruent in a model.
- Represent a model of a similar shape when given a two-dimensional shape.
- Graph two points a specified distance apart on the x- or y-axis in quadrant I.

- Recognize the cylinder or the cone with the greatest volume when given three cylinders or three cones with either the same base or the same height.
- Distinguish a scatter plot from nongraphical representations.
- Recognize the line of best fit on a scatter plot.

- Identify the cone, cylinder, or sphere with the greatest volume when given three cones with either the same base or the same height, three cylinders with either the same base or the same height, or three spheres.
- Identify a scatter plot from graphical representations.
- Identify the line of best fit for a scatter plot.

- Compare volumes among representations of cones, cylinders, or spheres when given three cones with either the same base or the same height, three cylinders with either the same base or the same height, or three spheres.
- Identify information on a scatter plot.
- Interpret information by using a line of best fit from a scatter plot.